

JOB HAZARD ANALYSIS		
JOB: Biogenic Silica Sample Preparation		Date Created: 6/21/00 Date Last Modified: 1/14/02
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Recommended Protective Clothing and Equipment:	Lab coat, gloves, safety glasses, dust mask, oven mitts, proper footwear	
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Sequence of Basic Job Steps	Potential Accidents/Hazards	Recommended Safe Job Procedures
Dry the wet sediment aliquot in an oven at 60°C for 24 hours	See Oven JHA	See Oven JHA
Quantitatively transfer 50 mg dried material to centrifuge tubes and record sample # and mass	See aliquot making JHA	See aliquot making JHA
Pipette 5 ml of Hydrogen Peroxide solution (10% H ₂ O ₂) into centrifuge tube	Inhalation/skin contact with H ₂ O ₂	Wear proper PPE (gloves, lab coat, glasses, shoes)
Pipette 5 ml of Hydrochloric Acid solution (1 N HCl) into centrifuge tube	Inhalation/skin contact with HCl	Wear proper PPE (gloves, lab coat, glasses, shoes)
Pipette Milli-Q water to samples to stop the reaction	Splashes, spills	Wear proper PPE (gloves, lab coat, glasses, shoes)
Mixing sodium carbonate solution	Inhalation/skin contact with Na ₂ CO ₃	Wear dust mask, gloves, and lab coat
Shaking samples in hot water bath at 95°C for 5 hours	Skin contact with hot water or equipment	Wear proper protective equipment
Pipette .9 ml of Nitric Acid into sample cups	Inhalation/skin contact with HNO ₃	Wear proper PPE (gloves, lab coat, glasses, shoes)